NetTop S330 Series

User Manual

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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

CALIFORNIA, USA ONLY
The Lithium battery adopted on this product contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.
"Perchlorate Material-special handling may apply, see www.dtsc.ca.gov/hazardouswaste/perchlorate"

ASRock Website: http://www.asrock.com

Safety instructions

Your system is designed and tested to meet the latest standards of safety for information technology equipment. However, to ensure your safety, it is important that you read the following safety instructions.

Setting up your system

- Read and follow all instructions in the documentation before you operate your system.
- Do not use this product near water or a heated source such as a radiator.
- Set up the system on a stable surface.
- Openings on the chassis are for ventilation. Do not block or cover these openings. Make sure you leave plenty of space around the system for ventilation. Never insert objects of any kind into the ventilation openings.
- Use this product in environments with ambient temperatures between 0° C and 40° C.
- If you use an extension cord, make sure that the total ampere rating of the devices plugged into the extension cord does not exceed its ampere rating.

Care during use

- Do not walk on the power cord or allow anything to rest on it.
- Do not spill water or any other liquids on your system.
- When the system is turned OFF, a small amount of electrical current still flows. Always unplug all power, modem, and network cables from the power outlets before cleaning the system.
- If you encounter the following technical problems with the product, unplug the power cord and contact a qualified service technician or your retailer.
  - The power cord or plug is damaged.
  - Liquid has been spilled into the system.
  - The system does not function properly even if you follow the operating instructions.
  - The system was dropped or the cabinet is damaged.
  - The system performance changes.

No disassembly

NOTE:

The warranty does not apply to products (including HDD, ODD, memory and warranty seal) that have been damaged as a result of attempting to disassemble/reassemble the system or modifying the hardware configuration.

Safety cautions and warnings

Optical Drive Safety Information

Optical drives sold with this system contains a CLASS 1 LASER PRODUCT.

CAUTION:
Invisible laser radiation when open. Do not stare into beam or view directly with optical instruments.

WARNING:
Making adjustments or performing procedures other than those specified in the user's manual may result in hazardous laser exposure. Do not attempt to disassemble the optical drive. For your safety, have the optical drive serviced only by an authorized service provider.

Product disposal notice

IMPORTANT:
This symbol of the crossed out wheeled bin indicates that the product (electrical and electronic equipment) should not be placed in municipal waste. Check local regulations for disposal of electronic products.

Nordic Lithium Cautions (for lithium-ion batteries)

CAUTION!
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Installation Notices

Do not place this product underneath heavy loads or in an unstable position.

Do not use or expose this product around magnetic fields as magnetic interference may affect the performance of the product.

Do not expose this product to high levels of direct sunlight, high-humidity or wet conditions.

Do not block the air vents to this product or impede the airflow in any way.

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Chapter 1 Introduction

Thank you for purchasing ASRock ***NetTop S330 Series***, a reliable product produced under ASRock's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock's commitment to quality and endurance.

In this manual, chapter 1 and 2 contain introduction of the hardware and step-by-step guide to the hardware installation. Chapter 3 and 4 contain the configuration guide to BIOS setup and information of the Support CD.

Because the hardware specifications and the BIOS software might be updated, the content of this manual will be subject to change without notice. In case any modifications of this manual occur, the updated version will be available on ASRock website without further notice. You may find the latest VGA cards and CPU support lists on ASRock website as well. ASRock website http://www.asrock.com
If you require technical support related to this product, please visit our website for specific information about the model you are using.
www.asrock.com/support/index.asp

1.1 Package Contents

ASRock ***NetTop S330 Series***

ASRock Support CD

ASRock Quick Start Guide

One AC Power Cord

One AC/DC Adapter

One Anti-Slip Pad

1.2 Specifications

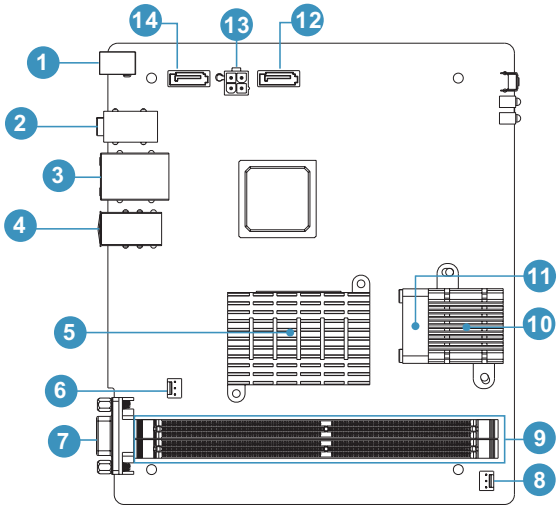
Processor	Intel® Atom™ 330 (Dual-Core CPU)
Chipset	Intel® 945GC + ICH7
Memory	DDR2 533MHz support up to 4GB * (2xDIMM Slots, Dual Channel)
VGA	Intel® GMA950, support DirectX9 3D Hardware Acceleration
HDD	2.5” HDD up to 500GB
DVD	DVD Super Multi (Slim type)
I/O	D-Sub VGA x1, USB 2.0 x6
LAN	Gigabit LAN
Sound	HD Audio 5.1 channel
Power	65W Adapter
Dimension	195mm(W)x70mm(H)x186m(L)
Volume (liters)	2.5L
Weight	1.74 Kg

* Due to the CPU and chipset limitation, the actual memory size may be less than 4GB for the reservation for system usage under Windows® XP, Windows® XP 64-bit, Windows® Vista™ and Windows® Vista™ 64-bit.

WARNING

Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, or using the third-party overclocking tools. Overclocking may affect your system stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. We are not responsible for possible damage caused by overclocking.

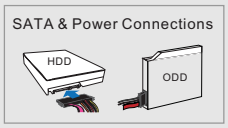
1.3 System Motherboard Components

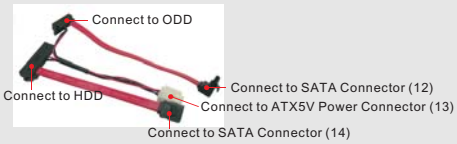


1. DC-In jack
2. Audio connectors
3. LAN & USB connectors
4. USB connectors
5. Northbridge heatsink
6. System fan connector
7. Display (VGA) port connector
8. CPU fan connector
9. Memory socket
10. CPU heatsink
11. CPU fan
12. SATA connector: For ODD SATA data cable
13. ATX5V power connector
14. SATA connector: For HDD SATA data cable

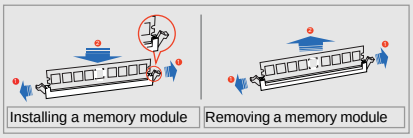
NOTE.

1. SATA and Power Connections

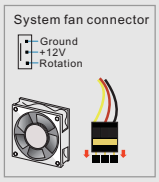



Connect to ODD
Connect to HDD
Connect to SATA Connector (12)
Connect to ATX5V Power Connector (13)
Connect to SATA Connector (14)

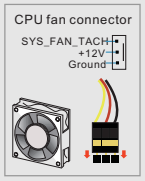
2. System Memory Socket Connection



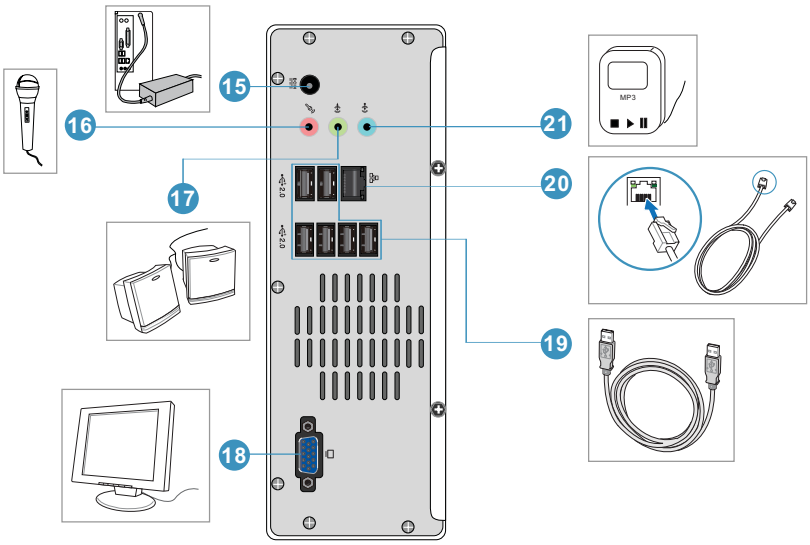
3. System Fan Connection



4. CPU Fan Connection

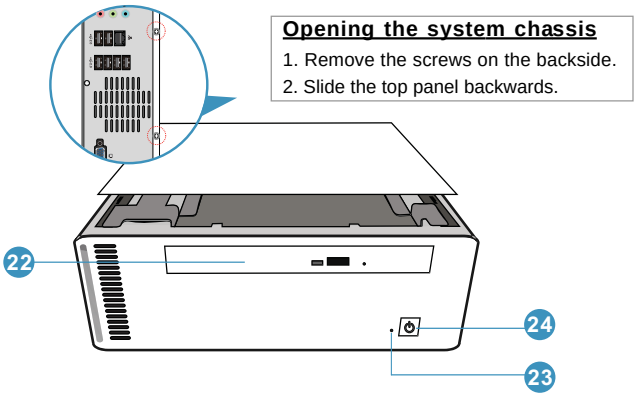


1.4 Rear Panel Connectinos



15. DC-In jack
16. Mic In (Pink): Microphone
17. Front L/R Out (Lime): Stereo speakers or headphones
18. Display (VGA) port: VGA monitor
19. USB2.0 ports: USB devices
20. LAN (RJ-45) port: Local Area Network
21. Line In (Blue): External audio device

1.5 System Chassis

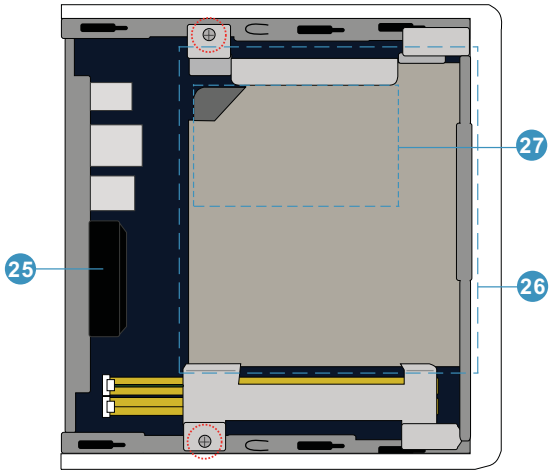


22. Optical Disc Drive
23. Drive activity indicator
24. Power ON/OFF button with status indicator

1.6 Internal System Components

Optical disc & Hard disk drives

The optical disc and hard disc drives are mounted in a drive cage. The cage can be removed by removing the top screws.



25. System Cooling Fan
26. Optical Disc Drive
27. Hard Disc Drive

Chapter 2 System Quick Installation

1. Connecting USB Devices (USB2.0 Ports)

2. Connecting VGA Monitor (Display (VGA) Port)

3. Connecting the Network (LAN (RJ-45) Port)

4. Connecting Microphone (Mic In Port)

5. Connecting Stereo Speakers or Headphones (Front L/R Out Port)

6. Connecting External Audio Device (Line In Port)

7. Connecting Power (DC-In Jack Port)

8. Power on the System (Power Switch)

Chapter 3 System Components Reinstallation

1. Remove the cover screws on the rear panel.

Note: For safety reasons, please ensure that the power cord is disconnected before opening the case.

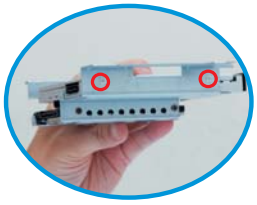
2. Slide the side cover toward the rear panel.

3. Pull the side cover upwards.

4. To change the storage drives, you need to remove SATA and power cables from ODD / HDD first, and unscrew the screws from both side.

5. Pull ODD / HDD rack backwards and take it out from the bay.

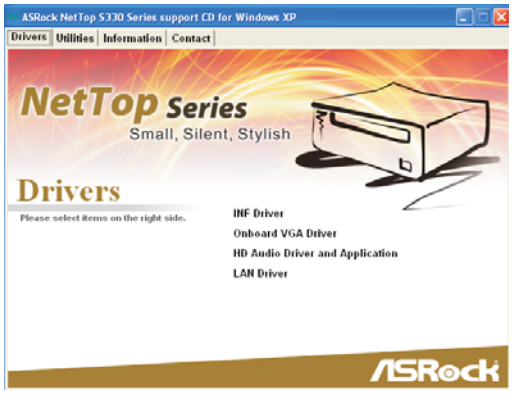
6. Unscrew the screws from the side of ODD / HDD rack, and change your required ODD / HDD.



7. Refer to above steps to place the new ODD / HDD to the chassis. Replace the side cover and fasten the screws.

Chapter 4 Driver Installation

To install the drivers to your system, please insert the support CD to your optical drive first. Then, the drivers compatible to your system can be auto-detected and listed on the support CD driver page. Please follow the order from up to bottom side to install those required drivers. Therefore, the drivers you install can work properly.



Chapter 5 Utility Menu

The utilities meu shows the applications and other software that this product supports.

5.1 Instant Boot

5.1.1 Introduction

Instant Boot, a user-friendly tool that allows you to turn on your PC in just a few seconds, provides a much more efficient way to save energy, time, money, and improves system running speed for your system *. It is applicable to both Windows® XP and Windows® Vista™.

Instant Boot leverages the S3 and S4 ACPI (Advanced Configuration and Power Interface) features which normally enable the Sleep/Standby and Hibernation modes in Windows® to shorten boot up time. By calling S3 and S4 at specific timing during the shutdown and startup process, Instant Boot allows you to enter your Windows® desktop in a few seconds.

There are two modes of Instant Boot available: Fast Mode and Regular Mode. In Fast Mode, it uses S3 and takes only a few seconds for OS to resume to working state, which is 10 times faster than traditional boot up time (50 to 60 seconds). Even the Regular Mode is 3 times faster than traditional boot up time.

Instant Boot guarantees a clean Windows® boot to consume less power, time and money without any accumulated garbage data, and you can still keep your data safe even there is a power cut. Also, the Windows® update speed will become faster.

* This function is applicable ONLY to single user that does not secure ID and Password to their systems.
* The boot up time depends on the hardware configuration.

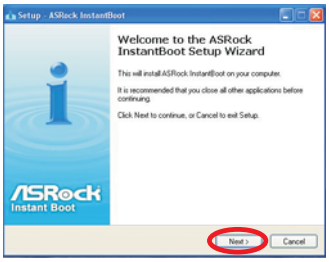
5.1.2 Installation

Please read below procedures carefully before you install Instant Boot.

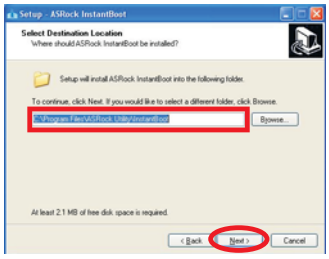
A. Install Instant Boot driver from ASRock support CD, or you may click following link to get the latest utility and BIOS:
http://www.asrock.com/feature/InstantBoot/download.asp

B. Execute the Instant Boot installation program under Windows®. Please follow the instructions on Instant Boot setup page.

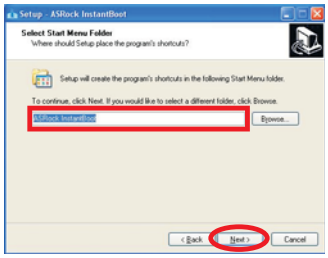
a. Click “Next” to continue.


Setup - ASRock InstantBoot
Welcome to the ASRock InstantBoot Setup Wizard
This will install ASRock InstantBoot on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
ASRock Instant Boot
Next >
Cancel

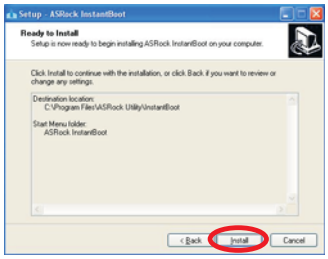
b. Select destination location. You may choose a different folder if you need, and click “Next”.


Setup - ASRock InstantBoot
Select Destination Location
Where should ASRock InstantBoot be installed?
Setup will install ASRock InstantBoot into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
Browse...
At least 2.1 MB of free disk space is required.
< Back
Next >
Cancel

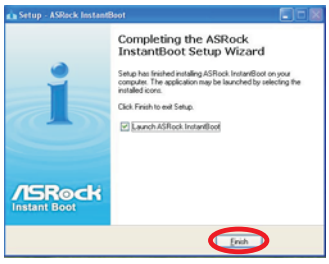
c. Select the start menu folder. You may choose a different folder if you need, and click “Next”.


Setup - ASRock InstantBoot
Select Start Menu Folder
Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
Browse...
< Back
Next >
Cancel

d. Click “Install” to begin installing Instant Boot driver.


Setup - ASRock InstantBoot
Ready to Install
Setup is now ready to begin installing ASRock InstantBoot on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files\ASRock Utility\InstantBoot
Start Menu folder:
ASRock InstantBoot
< Back
Install
Cancel

e. Click “Finish” to complete and exit the setup.


Setup - ASRock InstantBoot
Completing the ASRock InstantBoot Setup Wizard
Setup has finished installing ASRock InstantBoot on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Launch ASRock InstantBoot
ASRock
Instant Boot
Finish

C. After the installation is completed, you will find an ASRock Instant Boot icon on the Windows® desktop.

D. Double click ASRock Instant Boot icon on the desktop, then Instant Boot main menu will pop up.

E. On Instant Boot main menu, you can choose “Fast Mode”, “Regular Mode” or “Disable Instant Boot”. After that, please click “Apply” to save the change. Please notice that you need to keep AC power on if you select “Fast Mode”.

F. When you want to shut down the computer, please simply select “Shut Down” from Windows® “Start menu”.

G. Now, the system will restart once automatically. After reentering into OS, the system will shutdown again.

H. Next time when you turn on your system, you can enjoy the benefit of Instant Boot.

5.2 ASRock OC Tuner

5.2.1 Introduction

ASRock OC Tuner is a user-friendly overclocking tool which allows you to guard your system by hardware monitor function and overclock your hardware devices to get the best system performance.

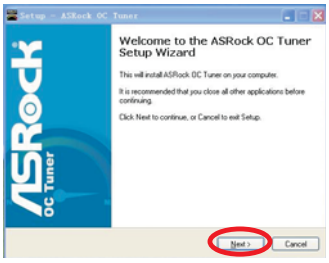
There are 3 major sections that are easy to fine-tune and monitor: Overclocking, Voltage Control, and Hardware Monitor. In Overclocking section, you are allowed to overclock CPU/PCI frequency for optimal system performance. In Voltage Control section, you can adjust voltage for CPU, DRAM, and VTT to enhance compatibility and the boost overclocking. In Hardware Monitor section, it shows the major readings of your system.

5.1.2 Installation

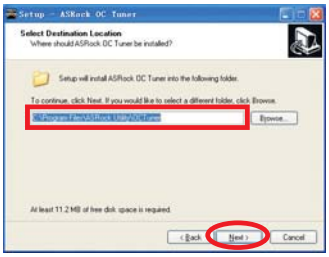
Please read below procedures carefully before you install ASRock OC Tuner.

A. Install ASRock OC Tuner driver from ASRock support CD, or you may click following link to get the latest utility:
http://www.asrock.com/feature/OCTuner/download.asp

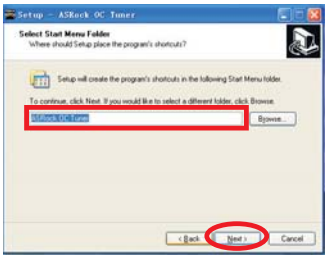
B. Execute the ASRock OC Tuner installation program under Windows®. Please follow the instructions on Instant Boot setup page.
a. Click “Next” to continue.



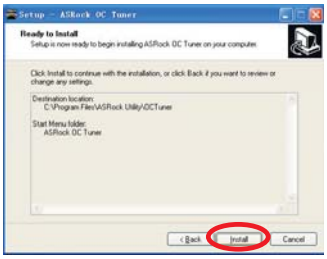
b. Select destination location. You may choose a different folder if you need, and click “Next”.


Setup - ASRock OC Tuner
Select Destination Location
Where should ASRock OC Tuner be installed?
Setup will install ASRock OC Tuner into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
Browse...
At least 11.2 MB of free disk space is required.
< Back
Next >
Cancel

c. Select the start menu folder. You may choose a different folder if you need, and click “Next”.


Setup - ASRock OC Tuner
Select Start Menu Folder
Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
Browse...
< Back
Next >
Cancel

d. Click “Install” to begin installing ASRock OC Tuner driver.


Setup - ASRock OC Tuner
Ready to Install
Setup is now ready to begin installing ASRock OC Tuner on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files\ASRock Utility\OCTuner
Start Menu folder:
ASRock OC Tuner
< Back
Install
Cancel

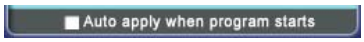
e. Click “Finish” to complete and exit the setup.

Setup - ASRock OC Tuner
ASRock
OC Tuner
Completing the ASRock OC Tuner Setup Wizard
Setup has finished installing ASRock OC Tuner on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Launch ASRock OC Tuner
Finish

C. After the installation is completed, you will find an ASRock OC Tuner icon

on the Windows® desktop.

D. Double click ASRock OC Tuner icon on the desktop, then ASRock OC Tuner main menu will pop up.

Auto apply when program starts 

If you check this button, it will save your settings when you close OC Tuner window. And next time when you run OC Tuner, it will start with the settings you made. If you do not check this button, next time when you run OC tuner, it will start with the default settings.

Note: Before you select "Auto apply when program starts", it is recommended to run some test programs to make sure your system is running very stably.

Auto run when Windows starts

If you click this button, every time you turn on your system and enter Windows®, the system will automatically start the OC Tuner.

Note: It is not recommended to overclock your system. Overclocking and over-voltage may affect your system stability, or even cause damage to your hardware devices. It should be done at your own risk and expense. ASRock is not responsible for possible damage caused by overclocking and and over-voltage.

Note: If system hangs after overclocking, please remove AC power cord and plug AC power cord again before you power on your system.

E. There are three sections in ASRock OC Tuner main menu: **Overclocking**, **Voltage Control**, and **Hardware Monitor**.

Overclocking – In the Overclocking section, there are CPU and PCIE chapters for parameter settings adjustment in pursuit of optimal system performance. Under the CPU chapter, you are able to fine-tune the CPU frequency and CPU ratio by clicking the “Up/Down” arrows at the display panel. After confirmation of the settings, please click on the “Go” button. Under the PCIE chapter, you are able to adjust the PCIE Frequency by clicking on the “Up/Down” arrows and press “Go” for confirmation.

Voltage Control – In the Voltage Control section, there are many voltage adjustment items, such as CPU, DRAM, and VTT items. The voltage control is relevant to overclocking.
You may adjust respective voltages by clicking the “Up/Down” arrows and confirm by “Go” respectively.

Hardware Monitor – In the Hardware Monitor section, it shows the major readings of your system. There are CPU speed, Current FSB, Ratio, PCIE Speed and respective voltages.

Chapter 6 BIOS SETUP UTILITY

6.1 Introduction

This section explains how to use the BIOS SETUP UTILITY to configure your system. The BIOS chip on the system stores the BIOS SETUP UTILITY. You may run the BIOS SETUP UTILITY when you start up the computer. Please press <F2> during the Power-On-Self-Test (POST) to enter the BIOS SETUP UTILITY, otherwise, POST will continue with its test routines.

If you wish to enter the BIOS SETUP UTILITY after POST, restart the system by pressing <Ctl> + <Alt> + <Delete>, or by pressing the reset button on the system chassis. You may also restart by turning the system off and then back on.

Because the BIOS software is constantly being updated, the following BIOS setup screens and descriptions are for reference purpose only, and they may not exactly match what you see on your screen.

6.1.1 BIOS Menu Bar

The top of the screen has a menu bar with the following selections:

Main	To set up the system time/date information
Smart	To load the BIOS according to your requirements
Advanced	To set up the advanced BIOS features
Boot	To set up the default system device to locate and load the Operating System
Security	To set up the security features
Exit	To exit the current screen or the BIOS SETUP UTILITY

Use <←> key or <→> key to choose among the selections on the menu bar, and then press <Enter> to get into the sub screen.

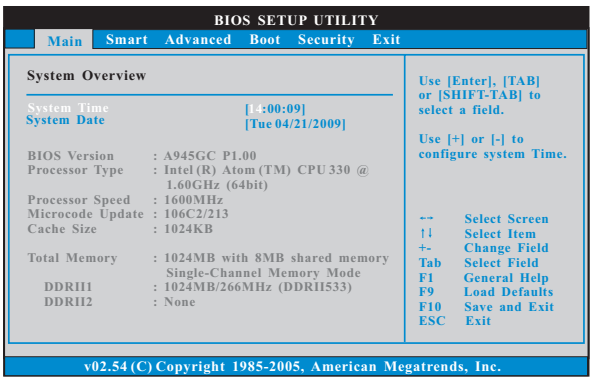
6.1.2 Navigation Keys

Please check the following table for the function description of each navigation key.

Navigation Key(s)	Function Description
← / →	Moves cursor left or right to select Screens
↑ / ↓	Moves cursor up or down to select items
+ / -	To change option for the selected items
<Enter>	To bring up the selected screen
<F1>	To display the General Help Screen
<F9>	To load optimal default values for all the settings
<F10>	To save changes and exit the BIOS SETUP UTILITY
<ESC>	To jump to the Exit Screen or exit the current screen

6.2 Main Screen

When you enter the BIOS SETUP UTILITY, the Main screen will appear and display the system overview


BIOS SETUP UTILITY
Main Smart Advanced Boot Security Exit
System Overview
System Time [12:00:09]
System Date [Tue 04/21/2009]
BIOS Version : A945GC P1.00
Processor Type : Intel(R) Atom(TM) CPU 330 @ 1.60GHz (64bit)
Processor Speed : 1600MHz
Microcode Update : 106C2/213
Cache Size : 1024KB
Total Memory : 1024MB with 8MB shared memory
Single-Channel Memory Mode
DDRII1 : 1024MB/266MHz (DDRII533)
DDRII2 : None
Use [Enter], [TAB] or [SHIFT-TAB] to select a field.
Use [+] or [-] to configure system Time.
↔ Select Screen
↑↓ Select Item
+- Change Field
Tab Select Field
F1 General Help
F9 Load Defaults
F10 Save and Exit
ESC Exit
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System Time [Hour:Minute:Second]

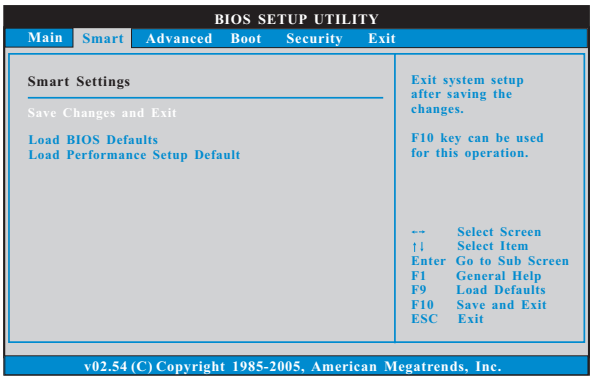
Use this item to specify the system time.

System Date [Day Month/Date/Year]

Use this item to specify the system date.

6.3 Smart Screen

In the Smart screen, you can load the BIOS setup according to your requirements.



Save Changes and Exit

When you select this option, it will pop-out the following message, “Save configuration changes and exit setup?” Select [OK] to save the changes and exit the BIOS SETUP UTILITY.

Load BIOS Defaults

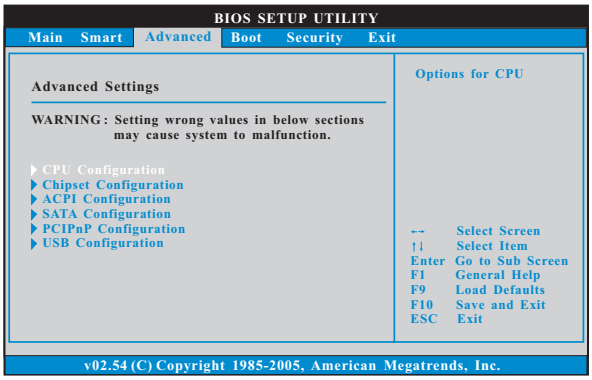
Load BIOS default values for all the setup questions. F9 key can be used for this operation.

Load Performance Setup Default

This performance setup default may not be compatible with all system configurations. If system boot failure occurs after loading, please resume optimal default settings. F5 key can be used for this operation.

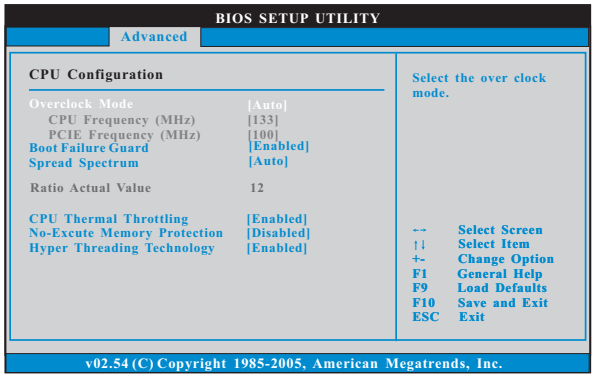
6.4 Advanced Screen

In this section, you may set the configurations for the following items: CPU Configuration, Chipset Configuration, ACPI Configuration, SATA Configuration, PCIPnP Configuration and USB Configuration.



Setting wrong values in this section may cause the system to malfunction.

6.4.1 CPU Configuration



Overclock Mode

Use this to select Overclock Mode. The default value is [Auto]. Cnfiguration options: [Auto], [Manual] and [Optimized].

CPU Frequency (MHz)

Use this option to adjust CPU frequency.

PCIE Frequency (MHz)

Use this option to adjust PCIE frequency.

Boot Failure Guard

Enable or disable the feature of Boot Failure Guard.

Spread Spectrum

This item should always be [Auto] for better system stability.

Ratio Actual Value

This is a read-only item, which displays the ratio actual value of this motherboard.

CPU Thermal Throttling

You may select [Enabled] to enable CPU internal thermal control mechanism to keep the CPU from overheated.

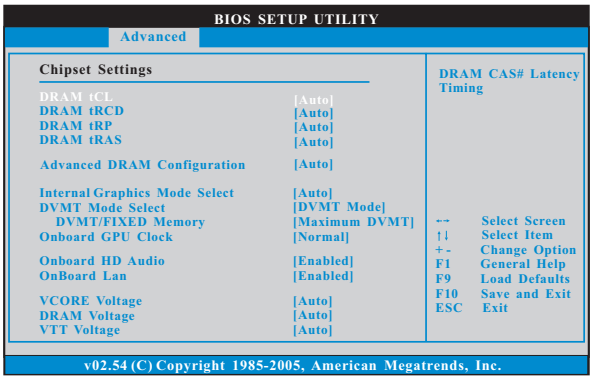
No-Excute Memory Protection

No-Execution (NX) Memory Protection Technology is an enhancement to the IA-32 Intel Architecture. An IA-32 processor with "No Execute (NX) Memory Protection" can prevent data pages from being used by malicious software to execute code.

Hyper Threading Technology

To enable this feature, it requires a computer system with an Intel Pentium® 4 processor that supports Hyper-Threading technology and an operating system that includes optimization for this technology, such as Microsoft® Windows® XP. Set to [Enabled] if using Microsoft® Windows® XP, or Linux kernel version 2.4.18 or higher.

6.4.2 Chipset Configuration



DRAM tCL

Use this item to adjust the means of memory accessing. Configuration options are [5], [4], [3] and [Auto].

DRAM tRCD

This controls the latency between the DRAM active command and the read / write command. Configuration options: [2 DRAM Clocks], [3 DRAM Clocks], [4 DRAM Clocks], [5 DRAM Clocks], [6 DRAM Clocks] and [Auto].

DRAM tRP

This controls the idle clocks after a precharge command is issued. Configuration options: [2 DRAM Clocks], [3 DRAM Clocks], [4 DRAM Clocks], [5 DRAM Clocks], [6 DRAM Clocks] and [Auto].

DRAM tRAS

Thhis controls the number of DRAM clocks for TRAS. Configuration options: [4 DRAM Clocks], [5 DRAM Clocks], [6 DRAM Clocks], [7 DRAM Clocks], [8 DRAM Clocks], [9 DRAM Clocks], [10 DRAM Clocks], [11 DRAM Clocks], [12 DRAM Clocks], [13 DRAM Clocks], [14 DRAM Clocks], [15 DRAM Clocks] and [Auto].

Advanced DRAM Configuration

This item allows you to adjust advanced DRAM configuration. The default value is [Auto]. Configuration options: [Auto] and [Manual].

Internal Graphics Mode Select

If you select [Auto], the onboard VGA will be automatically disabled when you install VGA card; the onboard VGA will be enabled without the installation of any add-on VGA card. If you select [Enabled, 8MB] or [Enabled, 1MB], the onboard VGA will be enabled.

DVMT Mode Select

Use this option to adjust DVMT mode. Configuration options: [Fixed Mode], [DVMT Mode] and [Fixed+DVMT Mode]. The default value is [DVMT Mode]. DVMT (Dynamic Video Memory Technology) is an architecture that offers breakthrough performance for the motherboard through efficient memory utilization. In Fixed mode, a fixed-size fragment of the system memory is allocated to the graphics core. In DVMT mode, the graphics driver allocates memory as needed for running graphics applications and is cooperatively using this memory with other system components. In Fixed+DVMT mode, the graphics processor gets a fixed-size chunk of 64MB of memory and up to 64MB of dynamically-allotted memory. This mode guarantees that at least 64MB of memory is available to the graphics core, with a possibility to increase this amount to 128MB, if necessary. This item will not be used under Windows® Vista™ OS because the driver will intelligently detect physical memory available and allocate necessary video memory.

DVMT/FIXED Memory

You are allowed to adjust the shared memory size in this item if you set DVMT Mode Select as [DVMT Mode]. Configuration options: [64MB], [128MB] and [Maximum DVMT].

Onboard GPU Clock

Select [Normal] or [Overclock] for onboard GPU clock. The default value is [Normal].

Onboard HD Audio

Select [Auto], [Enabled] or [Disabled] for the onboard HD Audio feature.

OnBoard Lan

This allows you to enable or disable the “OnBoard Lan” feature.

VCORE Voltage

Use this to select VCORE Voltage. Configuration options: [Auto], [1.10V], [1.15V], [1.20V] and [1.25V]. The default value of this feature is [Auto].

DRAM Voltage

Use this to select DRAM Voltage. Configuration options: [Auto], [1.794V], [1.908V], [2.029V] and [2.144V]. The default value of this feature is [Auto].

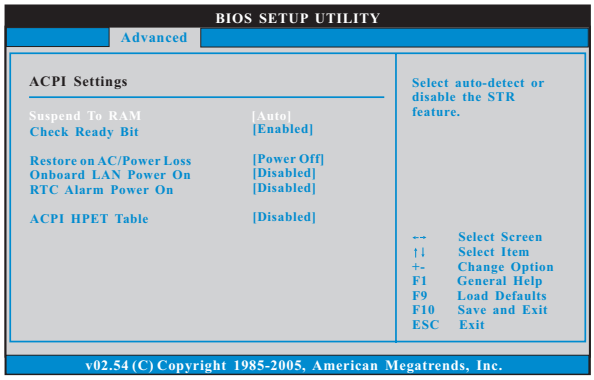
VTT Voltage

Use this to select VTT Voltage. Configuration options: [Auto], [1.11V], [1.21V], [1.31V] and [1.41V]. The default value of this feature is [Auto].

+9V Voltage

Use this to select +9V Voltage. Configuration options: [Auto], [8.25V] and [9.20V]. The default value of this feature is [Auto].

6.4.3 ACPI Configuration



Suspend to RAM

This field allows you to select whether to auto-detect or disable the Suspend-to-RAM feature. Select [Auto] will enable this feature if the system supports it.

Check Ready Bit

Use this item to enable or disable the feature Check Ready Bit. This option only appears when you set “Suspend to RAM” to [Auto].

Restore on AC/Power Loss

This allows you to set the power state after an unexpected AC/Power loss. If [Power Off] is selected, the AC/Power remains off when the power recovers. If [Power On] is selected, the AC/Power resumes and the system starts to boot up when the power recovers.

Onboard LAN Power On

Use this item to enable or disable onboard LAN to power on the system.

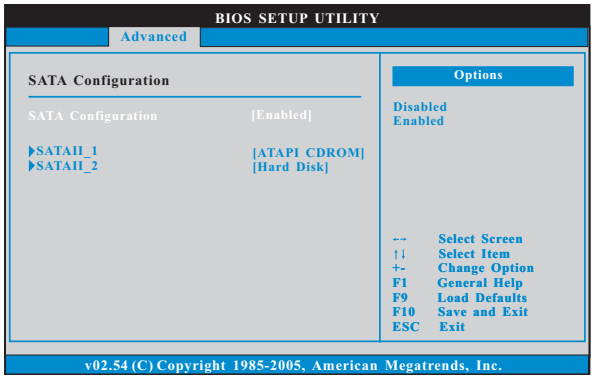
RTC Alarm Power On

Use this item to enable or disable RTC (Real Time Clock) to power on the system.

ACPI HPET Table

Use this item to enable or disable ACPI HPET Table. The default value is [Disabled]. Please set this option to [Enabled] if you plan to use this motherboard to submit Windows® Vista™ certification.

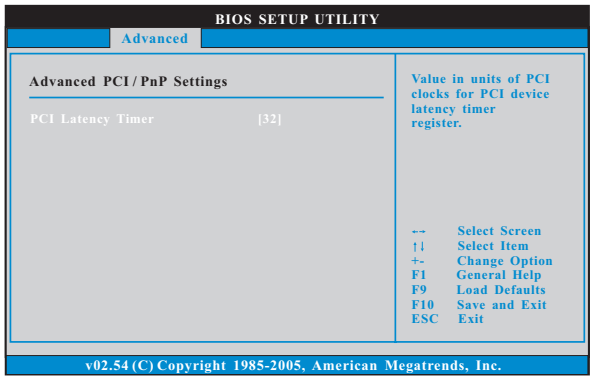
6.4.4 SATA Configuration



SATA Configuration

Use this item to enable or disable the “SATA Configuration” feature.

6.4.5 PCIPnP Configuration


BIOS SETUP UTILITY
Advanced
Advanced PCI / PnP Settings
PCI Latency Timer [32]
Value in units of PCI clocks for PCI device latency timer register.
↔ Select Screen
↑↓ Select Item
+- Change Option
F1 General Help
F9 Load Defaults
F10 Save and Exit
ESC Exit
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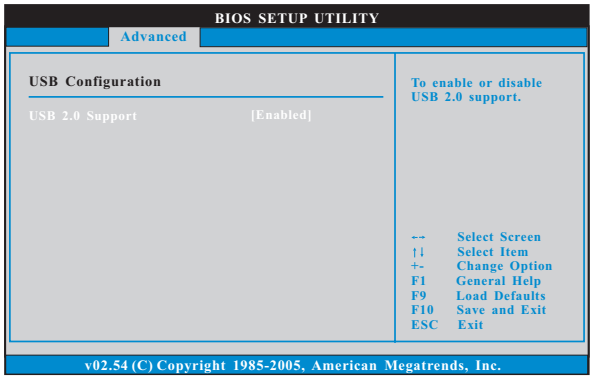
PCI Latency Timer

The default value is 32. It is recommended to keep the default value unless the installed PCI expansion cards’ specifications require other settings.

6.4.6 USB Configuration

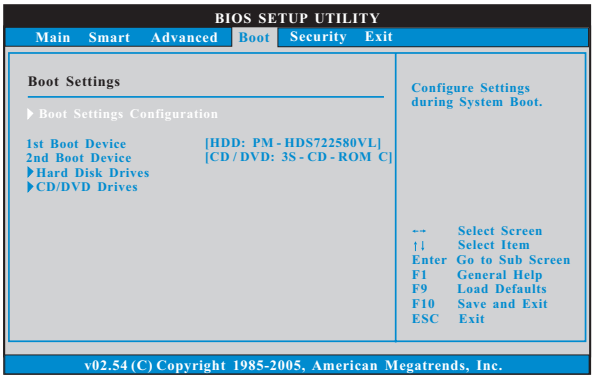


USB 2.0 Support

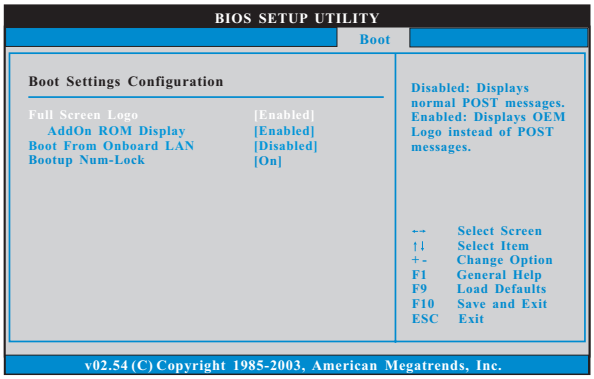
Use this item to enable or disable the USB 2.0 support.

6.5 Boot Screen

In this section, it will display the available devices on your system for you to configure the boot settings and the boot priority.



6.5.1 Boot Settings Configuration


BIOS SETUP UTILITY
Boot
Boot Settings Configuration
Full Screen Logo [Enabled]
AddOn ROM Display [Enabled]
Boot From Onboard LAN [Disabled]
Bootup Num-Lock [On]
Disabled: Displays normal POST messages. Enabled: Displays OEM Logo instead of POST messages.
↔ Select Screen
↑↓ Select Item
+- Change Option
F1 General Help
F9 Load Defaults
F10 Save and Exit
ESC Exit
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Full Screen Logo

Use this item to enable or disable OEM Logo. The default value is [Enabled].

AddOn ROM Display

Use this option to adjust AddOn ROM Display. If you enable the option "Full Screen Logo" but you want to see the AddOn ROM information when the system boots, please select [Enabled]. Configuration options: [Enabled] and [Disabled]. The default value is [Enabled].

Boot From Onboard LAN

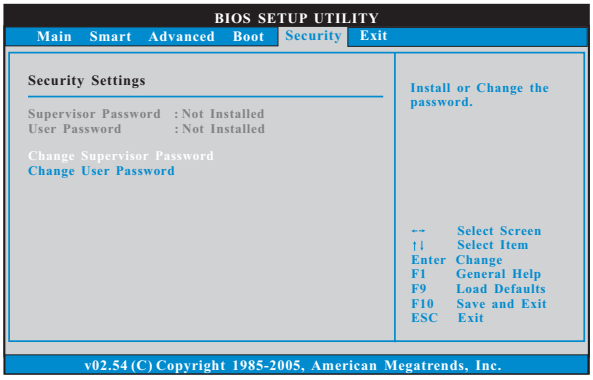
Use this item to enable or disable the Boot From Onboard LAN feature.

Boot Up Num-Lock

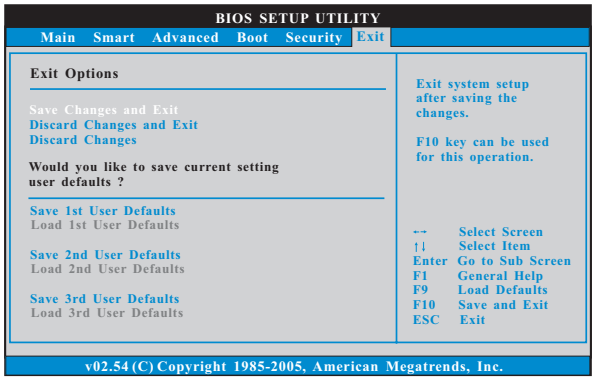
If this item is set to [On], it will automatically activate the Numeric Lock function after boot-up.

6.6 Security Screen

In this section, you may set or change the supervisor/user password for the system. For the user password, you may also clear it.



6.7 Exit Screen


BIOS SETUP UTILITY
Main Smart Advanced Boot Security Exit
Exit Options
Save Changes and Exit
Discard Changes and Exit
Discard Changes
Would you like to save current setting user defaults ?
Save 1st User Defaults
Load 1st User Defaults
Save 2nd User Defaults
Load 2nd User Defaults
Save 3rd User Defaults
Load 3rd User Defaults
Exit system setup after saving the changes.
F10 key can be used for this operation.
↔ Select Screen
↑↓ Select Item
Enter Go to Sub Screen
F1 General Help
F9 Load Defaults
F10 Save and Exit
ESC Exit
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Save Changes and Exit

When you select this option, it will pop-out the following message, "Save configuration changes and exit setup?" Select [OK] to save the changes and exit the BIOS SETUP UTILITY.

Discard Changes and Exit

When you select this option, it will pop-out the following message, "Discard changes and exit setup?" Select [OK] to exit the BIOS SETUP UTILITY without saving any changes.

Discard Changes

When you select this option, it will pop-out the following message, "Discard changes?" Select [OK] to discard all changes.

Would you like to save current setting user defaults?

In this option, you are allowed to load and save three user defaults according to your own requirements.

Chapter 7 Software Support

7.1 Install Operating System

This system supports various Microsoft® Windows® operating systems: XP / XP 64-bit / Vista™ / Vista™ 64-bit. Refer to your OS documentation for more information.

7.2 Support CD Information

The Support CD contains necessary drivers and useful utilities that enhance the system features.

7.2.1 Running The Support CD

To begin using the support CD, insert the CD into your CD-ROM drive. The CD automatically displays the Main Menu if "AUTORUN" is enabled in your computer. If the Main Menu did not appear automatically, locate and double click on the file "ASSETUP.EXE" from the BIN folder in the Support CD to display the menus.

7.2.2 Drivers Menu

The Drivers Menu shows the available devices drivers if the system detects installed devices. Please install the necessary drivers to activate the devices.

7.2.3 Utilities Menu

The Utilities Menu shows the applications software that the system supports. Click on a specific item then follow the installation wizard to install it.

7.2.4 Contact Information

If you need to contact ASRock or want to know more about ASRock, welcome to visit ASRock's website at http://www.asrock.com; or you may contact your dealer for further information.